

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF THE CLAIMS

1. (Previously Presented) A polymer composition comprising (A) optionally a matrix polymer, (B) a nanofiller which is a clay-based layered material having a particle size of from 1 to 100 nanometers, and (C) a polyolefin with functional groups which has been prepared directly by polymerizing olefin monomers with comonomers comprising functional groups using a single site catalyst; wherein the nanofiller (B) has been intercalated with a quaternary ammonium compound comprising intercalating agent.

2. (Previously Presented) A polymer composition according to claim 1, wherein the fraction of the comonomers with functional groups in polyolefin (C) is from 0.05 to 10 mol %.

3. (Previously Presented) A polymer composition according to claim 2, wherein the fraction of the comonomers with functional groups in polyolefin (C) is from about 0.1 to 5 mol %.

4. (Previously Presented) A polymer composition according to claim 3, wherein the fraction of the comonomers with functional groups in polyolefin (C) is from 0.1 to 2 mol %.

5. (Previously Presented) A polymer composition according to claim 1, wherein polyolefin (C) is a polyolefin with polar groups.

6. (Previously Presented) A polymer composition according to claim 5, wherein the polar comonomers used in the preparation of polyolefin (C) are monomers comprising a carbon-carbon double bond and an organic alcohol or acid group.

7. (Previously Presented) A polymer composition according to claim 6, wherein said comonomers comprise from 6 to 18 carbon atoms.

8. (Previously Presented) A polymer composition according to claim 7 wherein said comonomers comprise from 8 to 16 carbon atoms.

9. (Previously Presented) A polymer composition according to claim 1, wherein polyolefin (C) is a copolymer comprising ethylene and/or propylene monomers and comonomers with functional groups.

10. (Cancelled).

11. (Previously Presented) A polymer composition according to claim 1, wherein matrix polymer (A) is a polyolefin.

12. (Previously Presented) A polymer composition according to claim 11, wherein matrix polymer (A) is an ethylene or propylene homo- or copolymer.

13. (Previously Presented) A polymer composition according to claim 1, wherein polyolefin (C) is present in an amount of 1 to 100 parts by weight per 100 parts by weight of the total composition.

14. (Previously Presented) A polymer composition according to claim 13 wherein polyolefin (C) is present in an amount of 5 to 50 parts by weight per 100 parts by weight of the total composition.

15. (Previously Presented) A polymer composition according to claim 13, wherein polyolefin (C) is present in an amount of 4 to 10 parts by weight per 100 parts by weight of the total composition.

16. (Previously Presented) A polymer composition according to claim 1, wherein nanofiller (B) is present in an amount of 1 to 15 parts by weight per 100 parts by weight of the total composition.

17. (Previously Presented) A polymer composition according to claim 16 wherein nanofiller (B) is present in an amount of 2 to 10 parts by weight per 100 parts by weight of the total composition.

18. (Previously Presented) A polymer composition according to claim 17 wherein nanofiller (B) is present in an amount of 4 to 10 parts by weight per 100 parts by weight of the total composition.

19. (Previously Presented) A polymer composition according to claim 1, wherein the matrix polymer (A) is present in an amount of from 0 to 98 parts by weight per 100 parts by-weight of the total composition.

20. (Previously Presented) A polymer composition according to claim 19, wherein the matrix polymer (A) is present in an amount of from 40 to 93 parts by weight per 100 parts by weight of the total composition.

21. (Previously Presented) A polymer composition according to claim 20 wherein the matrix polymer (A) is present in an amount of from 45 to 91 parts by weight per 100 parts by weight of the total composition.

22. (Previously Presented) A process comprising:
providing a polymer composition comprising (A) a matrix polymer, (B) a nanofiller which is a clay-based layered material that has been intercalated with an intercalating agent comprising a quaternary ammonium compound, the nanofiller having a particle size of from 1 to 100 nanometers; and (C) a polyolefin with functional groups which has been prepared directly by polymerizing olefin monomers with comonomers comprising functional groups using a single site catalyst; and
forming a product from the polymer composition.

23. (New) A polymer composition comprising (A) optionally a matrix polymer, (C) a polyolefin with functional groups which has been prepared directly by polymerizing olefin monomers with comonomers comprising functional groups using a single site catalyst; and dispersed therein (B) a nanofiller which is a clay-based layered material having a particle size of from 1 to 100 nanometers, wherein the nanofiller (B) has been intercalated with only a quaternary ammonium compound.